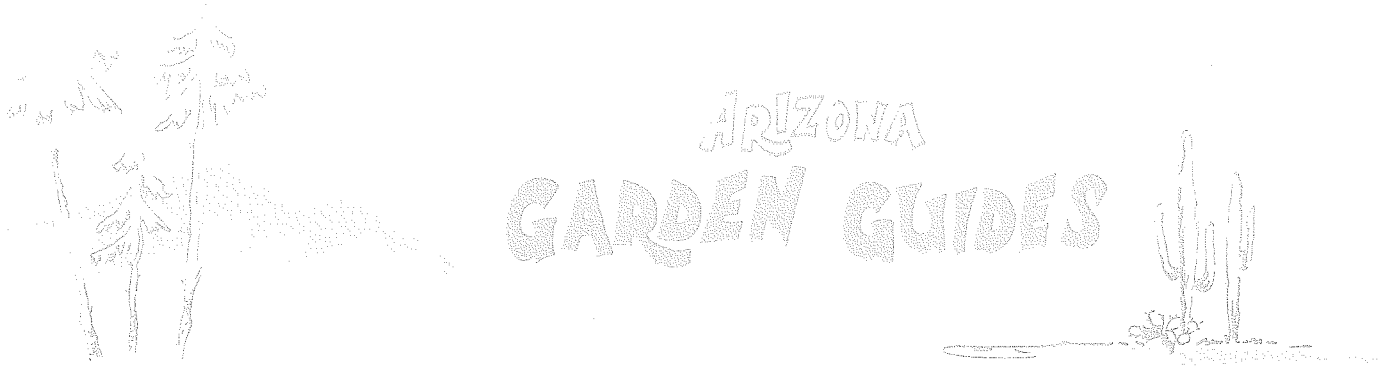

Arizona Plant Climate Zones

by

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Nowhere is home gardening more challenging or potentially more rewarding than in Arizona.

Because our climate ranges from subalpine to tropical desert, an almost bewildering array of ornamental plants can be grown in the state. However, very few plants are satisfactory over the entire range of Arizona's varied growing conditions. It is important, therefore, that the homegardener knows how local climate influences plant growth and which ornamental plants grow well in his area.

Many climatic factors help determine the kinds of plants that will grow in a given location. Minimum winter temperatures, frost occurrence, rainfall distribution, humidity, daylength and light intensity are all important. Of these, minimum winter temperatures are a major limitation and are least subject to change by cultural practices.

The plant climate zone map presented here is based on expected minimum temperatures throughout Arizona. It shows five different zones, each of which represents an area of winter hardiness for certain ornamental plants. These five plant climate zones give adequate information for most general gardening purposes.

However, important differences in plant performance may be found within a given zone. Most often these differences will be due to a change in elevation and a corresponding cooler or warmer climate.

The climates of adjoining zones grade into one another near their boundaries. This sometimes makes it possible to grow plants considered too tender for a given zone, or it may exclude certain plants at the coldest extremes of that zone.

In the discussion of each climate zone, a number of plants are listed which normally survive there. These indicator plants may lead you to other ornamentals of similar growth requirements which will succeed in the area.

Microclimates also play a part in determining the kinds of plants that will grow in your garden. A microclimate is simply a small area which is noticeably colder or warmer than surrounding conditions.

Microclimates are formed by hills and valleys, building walls, hedges or windbreaks. These features may improve or prevent air drainage, provide shelter against strong winds, trap heat during the day and slowly release it during the night or in other ways modify local climate.

(Over)

Cooperative Extension Service, The University of Arizona

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. George E. Hull, Director of Extension Service, The University of Arizona College of Agriculture, Tucson, Arizona.

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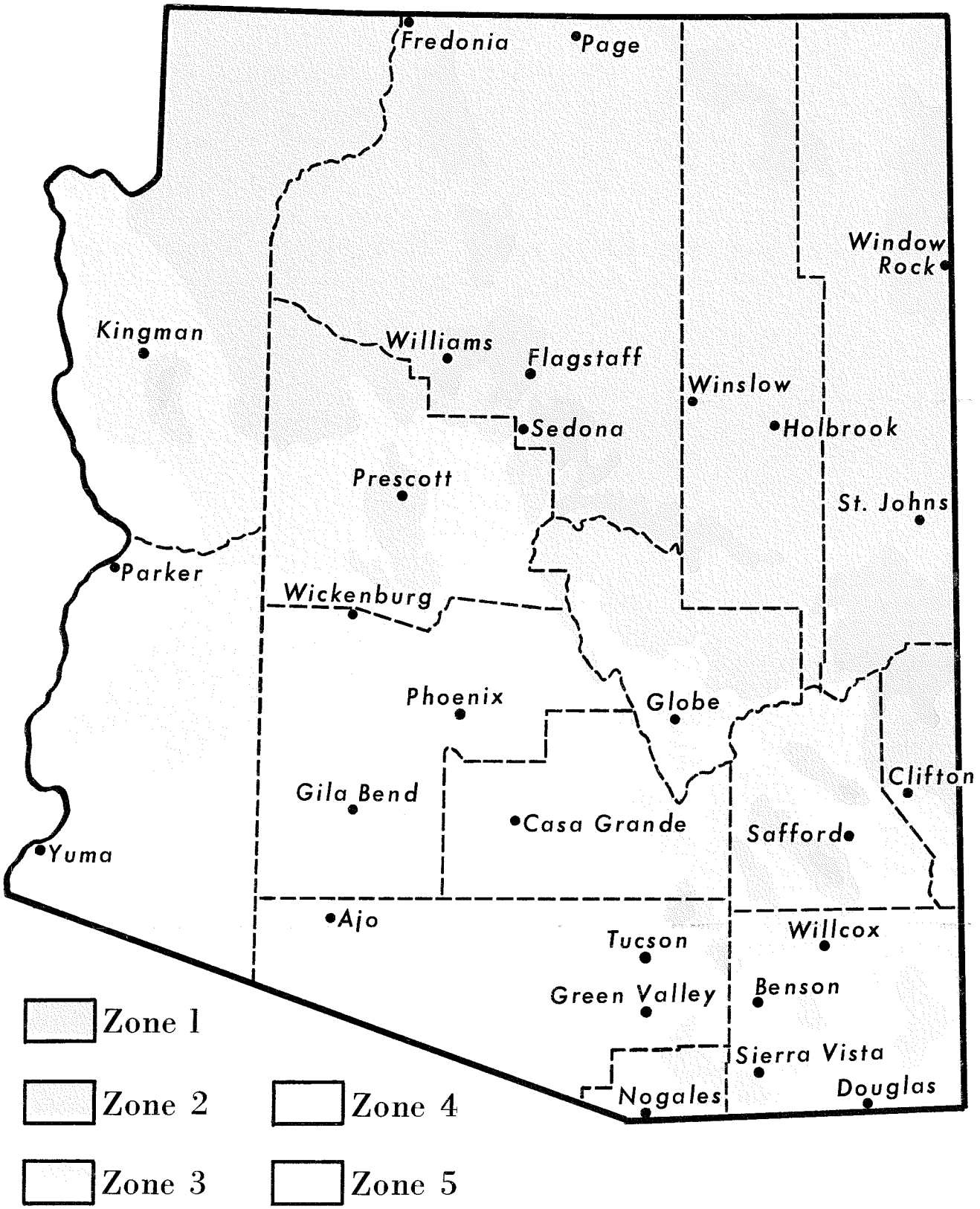

Arizona Plant Climate Zones

Climate for Arizona Cities

CITY	ELEVATION	AVERAGE SUMMER MAX.-MIN. TEMP.	AVERAGE WINTER MAX.-MIN. TEMP.	AVERAGE ANNUAL RAINFALL	AVERAGE DATE OF LAST KILLING FROST IN SPRING	AVERAGE DATE OF FIRST KILLING FROST IN AUTUMN	AVERAGE LENGTH OF GROWING SEASON (DAYS)
Ajo	1763	101-74	66-43	9.1	Jan. 19	Dec. 21	336
Alpine	8000	77-40	47-11	20.7	June 21	Sept. 13	84
Ash Fork	5140	90-54	54-23	12.9	May 10	Oct. 16	159
Benson	3635	95-63	64-30	11.1	Mar. 27	Nov. 8	226
Bisbee	5350	88-63	59-35	18.4	Mar. 25	Nov. 22	242
Buckeye	888	104-70	69-35	7.5	Mar. 9	Nov. 21	257
Casa Grande	1405	105-71	68-35	8.2	Mar. 7	Nov. 19	257
Chandler	1445	99-73	71-38	8.8	Mar. 9	Nov. 27	263
Clifton	3465	99-70	61-35	12.5	Feb. 25	Aug. 19	275
Douglas	3973	94-64	63-31	12.2	Apr. 4	Nov. 6	216
Flagstaff	6903	78-47	42-16	20.3	May 30	Sept. 28	120
Florence	1500	104-70	68-38	9.8	Mar. 8	Nov. 21	258
Gila Bend	737	107-73	70-38	5.7	Feb. 21	Dec. 2	284
Globe	3540	96-64	59-32	15.8	Mar. 30	Nov. 13	228
Grand Canyon	6965	82-51	43-20	15.8	May 19	Oct. 6	140
Holbrook	5069	92-56	51-21	8.6	Apr. 28	Oct. 19	174
Kingman	3333	95-63	58-32	10.6	Apr. 10	Nov. 9	213
Natural Bridge	4607	87-61	54-31	24.2	Apr. 14	Nov. 10	210
Nogales	3800	94-62	65-31	15.6	Apr. 1	Nov. 16	229
Parker	425	106-73	69-35	4.8	Mar. 2	Nov. 26	259
Phoenix	1083	102-74	67-41	7.7	Feb. 7	Dec. 6	302
Prescott	5410	87-53	52-21	19.3	May 17	Oct. 8	144
Safford	2900	98-65	62-30	9.0	Apr. 9	Nov. 2	207
Seligman	5219	89-51	52-22	10.8	May 17	Oct. 7	142
Snowflake	5644	89-52	50-18	12.2	May 24	Oct. 3	132
Springerville	6964	81-49	50-16	12.1	May 27	Oct. 2	128
St. Johns	5730	89-53	51-18	11.6	May 6	Oct. 10	158
Tombstone	4540	92-64	61-35	14.1	Mar. 27	Nov. 21	239
Tucson	2410	99-69	66-36	10.9	Mar. 20	Nov. 16	242
Wickenburg	2070	100-65	65-31	11.0	Apr. 2	Nov. 15	226
Willcox	4200	92-58	60-26	11.8	Apr. 27	Oct. 28	184
Winslow	4880	91-58	49-22	8.0	Apr. 30	Oct. 20	173
Yuma	138	104-74	69-44	3.4	Jan. 6	Dec. 25	353

(Continued)

ZONE 1
COLD MOUNTAINOUS REGIONS
(Elevation 6,000-8,000 feet)

At the high elevations, Arizona winters bring snow, sub-zero temperatures and frozen soils. The growing season for plants varies from 90 to 120 days. Precipitation averages 20 to 25 inches per year, sometimes more. The last killing frost in spring generally occurs in late May, but below-freezing temperatures have been recorded as late as mid-June.

Typical Zone 1 landscape plants include crabapple, birch, spruce, pyracantha (orange-berried), winged euonymus, flowering quince and lilac.

ZONE 2
COOL PLATEAU HIGHLANDS
(Elevation 4,000-6,000 feet)

Winters here are mostly cold with drying winds. Average winter temperatures are not as low as Zone 1, but snow and frozen ground can be expected during the coldest months.

Zone 2 provides a growing season of 150-200 frost-free days. The last date of killing frost in spring usually is late April to mid-May, depending on location. Annual precipitation varies from less than 10 inches at Tuba City to more than 20 inches at Williams.

Reliable plants for Zone 2 include Bradford pear, sugar maple, cranberry cotoneaster, Japanese holly, yew and most of the hardy viburnums.

ZONE 3
HIGH ALTITUDE DESERT
(Elevation 3,300-5,000 feet)

Average minimum winter temperatures near freezing provide the necessary chilling for such landscape plants as forsythia, lilac, redbud and crabapple. However, in most of this zone,

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Arizona Plant Climate Zones

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winters are mild enough and summers hot enough to grow oleander, loquat, southern magnolia, glossy privet and pomegranate. The growing season in this zone is about 200 to 220 days long.

In the southern parts of Zone 3, spring frosts are over by the end of March. Other areas are generally safe after April 10. Annual rainfall ranges from 10 to 15 inches in Benson to 15 to 20 inches in Sedona.

Woody ornamentals which grow well throughout Zone 3 include Carolina cherry laurel, Korean boxwood, Arizona cypress, Pinon pine, nandina and euonymus.

ZONE 4
MID-ALTITUDE DESERT
(Elevation 2,000-4,000 feet)

The mild winters of Zone 4 do not meet the cold requirement of many deciduous fruits, flowering trees and shrubs which grow in Zone 3.

On the other hand, the subtropicals and tender plants of Zone 5 must be protected from the hard frosts which occur here. September, October and November are ideal months for planting annuals, perennials and the basic landscape plants. This allows time for plants to become well-established in the new location before the onset of summer heat.

Fall planting is not recommended for tender subtropicals such as hibiscus, Bougainvillea and Natal plum which might be injured by winter frosts.

Tucson's growing season is about 242 days long with an average last date of spring frost on March 20. Safford and Wickenburg have a growing season about three weeks shorter. Bottlebrush, sour orange, xylosma, pineapple guava, Texas ranger, olive and star jasmine are representative Zone 4 plants.

ZONE 5
LOW-ALTITUDE DESERT
(Elevation 100-2,000 feet)

Zone 5 growing seasons are long, ranging from 302 days in Phoenix to 340 days in the Yuma area. The average minimum winter temperature recorded for this zone is around 36-37 degrees. However, temperatures occasionally dip below 20 degrees. In summer, average maximum temperatures are near 102 degrees. Annual rainfall is ten inches or less throughout Zone 5.

The wide temperature variations here exclude some subtropicals which thrive in milder coastal climates. However, such heat-loving subtropicals as Bauhinia, Thevetia and jacarandra grow well except in cold microclimates.

Other plants for Zone 5 landscapes are the queen palm, Carob, bottle tree, Natal plum, Bougainvillea, cape honeysuckle and silk oak.

The fall months of September and October signal the beginning of the planting year in Zone 5. In the case of annual flowers, fall planting permits a full life cycle before the high temperatures of late April and May.